

Title (en)

Method and system for continuously manufacturing liquid-crystal display element

Title (de)

Verfahren und System zur kontinuierlichen Herstellung von Flüssigkristallanzeigeelementen

Title (fr)

Procédé et système pour fabriquer de manière continue un élément d'affichage à cristaux liquides

Publication

EP 2315071 B1 20111026 (EN)

Application

EP 10176101 A 20100910

Priority

JP 2009236090 A 20091013

Abstract (en)

[origin: EP2315071A1] The present invention provides a method and a system (1) for continuously manufacturing liquid-crystal display elements, using a continuous optical film laminate (15) which comprises at least an optically functional film (11) having an adhesive layer (12) provided thereon and a carrier film (13) releasably laminated on said adhesive layer (12), the optically functional film (11) including at least one defect-free region (Xa) and at least one defect-containing region (Xp), the defect-free region having a predefined length corresponding to a dimension of a liquid-crystal panel, the defect-containing region including at least one defect and defined as a region having a predefined length which is different from the length of the defect-free region, slit lines (16) being sequentially formed to extend in a transverse direction of the optical film laminate to form defect-free, normal optically functional film sheets and defect-containing optically functional film sheets, the normal optically functional film sheet and the defect-containing optically functional film sheet corresponding to respective ones of the regions in the optically functional film. The optical film laminate including the carrier film is wound into a roll. In manufacturing the liquid-crystal display elements, only the defect-free, normal sheets are laminated to respective ones of the liquid-crystal panels.

IPC 8 full level

G02F 1/1333 (2006.01); **G02F 1/1335** (2006.01); **G02F 1/133** (2006.01)

CPC (source: EP US)

B32B 41/00 (2013.01 - EP US); **G02F 1/1303** (2013.01 - EP US); **G02F 1/133305** (2013.01 - EP US); **G02F 1/133528** (2013.01 - EP US); **B32B 2457/202** (2013.01 - EP US); **G02F 1/133351** (2013.01 - EP US); **G02F 2202/28** (2013.01 - EP US); **G02F 2203/69** (2013.01 - EP US); **Y10T 156/1056** (2015.01 - EP US); **Y10T 156/1057** (2015.01 - EP US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

EP 2315071 A1 20110427; **EP 2315071 B1 20111026**; AT E530943 T1 20111115; CN 102043278 A 20110504; CN 102043278 B 20130424; JP 2011085630 A 20110428; JP 4503691 B1 20100714; KR 101011455 B1 20110128; PL 2315071 T3 20120330; TW 201113600 A 20110416; TW I341417 B 20110501; US 2011083789 A1 20110414; US 7993476 B2 20110809

DOCDB simple family (application)

EP 10176101 A 20100910; AT 10176101 T 20100910; CN 201010229473 A 20100709; JP 2009236090 A 20091013; KR 20100052198 A 20100603; PL 10176101 T 20100910; TW 99129093 A 20100830; US 90312110 A 20101012